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Response to fOA of 01/12/2009

Application No. 10/715,221

JUN 12 2009

AMENDMENTS TO THE CLAIMS

A complete listing of all claims and their current status is presented below. In the changes made to the following claims, [[deletions are double bracketed]] or ~~shown with strike through~~, and additions are underlined.

1-23. (Canceled)

24. (Currently Amended) A medical apparatus, for remodeling a mitral valve annulus adjacent to the coronary sinus, comprising:

an elongate body sized for implantation at least partially within the coronary sinus, the elongate body having a proximal end and a distal end, and being movable between a first configuration for transluminal delivery to at least a portion of the coronary sinus and a second configuration for remodeling the mitral valve annulus from within the coronary sinus, the elongate body in the second configuration being configured to exert, while residing completely within the vasculature system, a force against a wall of the coronary sinus sufficient to influence the size of the mitral valve annulus;

a forming element attached to the elongate body at a point of attachment for manipulating the elongate body between the first configuration and the second configuration, wherein the forming element is slidably contained within the elongate body between the attachment point and the proximal end; and

a cardiac pacing electrode, carried by the elongate body and configured to be implanted in the coronary sinus with the elongate body;

wherein a portion of the forming element is configured to be removable after implantation of the elongate body within the coronary sinus while a remaining portion of the forming element is contained within the elongate body;

wherein the cardiac pacing electrode remains with the elongate body in the coronary sinus (i) after the elongate body is manipulated between the first configuration and the second configuration, (ii) after implantation of the elongate body within the

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coronary sinus, and (iii) after the portion of the forming element is removed from the coronary sinus.

25. **(Withdrawn)** The medical apparatus according to claim 24, wherein the electrode comprises an axially extending strip.

26-30. **(Canceled)**

31. **(Previously Presented)** The medical apparatus according to claim 24, wherein the forming element is movable relative to the elongate body in order to adjust the elongate body within the coronary sinus between the first and second configurations.

32. **(Previously Presented)** The medical apparatus according to claim 24, wherein the elongate body defines an arc when in the second configuration.

33. **(Original)** The medical apparatus according to claim 32, wherein a best fit constant radius curve corresponding to the arc has a radius within the range of from about 10 mm to about 20 mm.

34. **(Previously Presented)** The medical apparatus according to claim 24, further comprising a lock, for retaining the elongate body in the second configuration.

35. **(Withdrawn)** The medical apparatus according to claim 34, wherein the lock comprises an interference fit.

36. **(Original)** The medical apparatus according to claim 34, wherein the lock comprises an engagement surface, which is movable between a first, disengaged configuration and a second, engaged configuration.

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37. **(Original)** The medical apparatus according to claim 24, further comprising a coating on the body.

38. **(Previously Presented)** The medical apparatus according to claim 24, wherein the apparatus is movable from the first configuration to the second configuration in response to proximal retraction of the forming element.

39. **(Withdrawn)** The medical apparatus according to claim 24, wherein the apparatus is movable from the first configuration to the second configuration in response to distal advancement of the forming element.

40. **(Original)** The medical apparatus according to claim 24, further comprising an anchor for retaining the apparatus at a deployment site within a vessel.

41. **(Withdrawn)** The medical apparatus according to claim 40, wherein the anchor comprises a distal extension of the apparatus.

42. **(Original)** The medical apparatus according to claim 40, wherein the anchor comprises a friction enhancing surface structure for engaging the wall of the vessel.

43. **(Withdrawn)** The medical apparatus according to claim 40, wherein the anchor comprises at least one barb for piercing the wall of the vessel.

44. **(Original)** The medical apparatus according to claim 40, wherein the apparatus has an axial length of no more than about 10 cm.

45. **(Previously Presented)** The medical apparatus according to claim 24, wherein the maximum cross sectional dimension through the apparatus is no more than about 10 mm².

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46. **(Previously Presented)** The medical apparatus according to claim 24, further comprising an axially extending support in the body, attached to the forming element.

47-49. **(Canceled)**

50. **(Previously Presented)** The medical apparatus according to claim 24, comprising only one forming element attached to the elongate body at the point of attachment for manipulating the elongate body between the first configuration and the second configuration.

51. **(Previously Presented)** The medical apparatus of claim 24, wherein the forming element:

is disposed along a core of the elongate body;

is axially fixedly attached to the elongate body;

comprises a memory material that is formed such that, when the elongate body is positioned within the at least portion of the coronary sinus, the memory material provides a force effective to move the elongate body from the first configuration to the second configuration.

52. **(Previously Presented)** The medical apparatus of claim 51, wherein the memory material comprises a NiTi alloy.

53. **(Previously Presented)** The medical apparatus of claim 24, wherein the forming element comprises at least one of a polymeric wire, a polymeric strand, a metal wire, a metal strand, a multifilament line, a multifilament braided line, a multifilament woven line, a metal ribbon, and a polymeric ribbon.

54. **(Currently Amended)** A medical apparatus, for treating a mitral valve of a patient, comprising:

an elongate body sized and configured to be implanted at least partially within the coronary sinus of a patient's heart, the elongate body being movable between a delivery

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configuration and a deployment configuration, the elongate body in the deployment configuration, when implanted at least partially within the coronary sinus, being configured to apply a force against a wall of the coronary sinus sufficient to influence the size of the mitral valve annulus;

a forming element coupled with the elongate body for manipulating the elongate body between the delivery configuration and the deployment configuration, the forming element having a first portion that is configured to be removed from the patient after implantation of the elongate body in the coronary sinus; and

a cardiac electrode, carried by the elongate body and configured to remain with the elongate body after the first portion of the forming element is removed from the patient after implantation of the elongate body in the coronary sinus.

55. **(Previously Presented)** The medical apparatus of claim 54, wherein the elongate body is movable from the delivery configuration to the deployment configuration in response to relative movement between the forming element and the elongate body.

56. **(Previously Presented)** The medical apparatus of claim 54, wherein the elongate body is arcuate when in the deployment configuration.

57. **(Previously Presented)** The medical apparatus of claim 54, wherein the elongate body is configured to remain in the deployment configuration after the first portion of the forming element is removed from the patient.

58. **(Previously Presented)** The medical apparatus of claim 57, further comprising a lock that retains the elongate body in the deployment configuration after the first portion of the forming element is removed.

59. **(Previously Presented)** The medical apparatus of claim 54, wherein the forming element is coupled with the elongate body at a point of attachment positioned at a distal portion of the elongate body.

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60. (Previously Presented) The medical apparatus of claim 59, wherein the forming element remains coupled with the elongate body at the point of attachment after the first portion of the forming element is removed from the patient.

61. (Previously Presented) The medical apparatus of claim 54, wherein the electrode is configured to be in electrical communication with a cardiac rhythm management device.

62. (Previously Presented) A medical apparatus, for remodeling a mitral valve annulus of a patient adjacent to a coronary sinus, comprising:

an elongate body sized and configured to be implanted, along a delivery device, at least partially within the coronary sinus of the patient;

a forming element that changes the elongate body between a first shape and a second shape such that, when implanted in the coronary sinus and in the second shape, the elongate body has a best fit curve of constant radius within a range of from about 1.0 cm to about 2.0 cm and is sized and shaped to change~~changes~~ a shape of the mitral valve annulus by exerting a force against a wall of the coronary sinus sufficient to influence the size of the mitral valve annulus; and

a cardiac pacing electrode, carried by the elongate body, the electrode being configured to remain with the elongate body after the forming element changes the elongate body to the second shape and after the delivery device is entirely removed from the patient.

63. (Previously Presented) The medical apparatus of claim 62, wherein the elongate body is movable from the first shape to the second shape in response to relative movement between the forming element and the elongate body.

64. (Previously Presented) The medical apparatus of claim 62, wherein the elongate body is arcuate when in the second shape.

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65. **(Previously Presented)** The medical apparatus of claim 62, wherein the elongate body is configured to remain in the second shape after the delivery device is removed from the patient.

66. **(Previously Presented)** The medical apparatus of claim 65, further comprising a lock that retains the elongate body in the second shape after the delivery device is removed from the patient.

67. **(Previously Presented)** The medical apparatus of claim 62, wherein the elongate body comprises a proximal portion and a distal portion such that when implanted in the coronary sinus, the proximal portion is closer to the ostium of the coronary sinus than is the distal portion, and the forming element is coupled with the elongate body at the distal portion.

68. **(Previously Presented)** The medical apparatus of claim 67, wherein the forming element remains coupled with the elongate body at the point of attachment after the delivery device is entirely removed from the patient.

69. **(Canceled)**

70. **(New)** A medical apparatus, for treating a mitral valve of a patient, comprising:
an elongate body that, when implanted within the coronary sinus of the patient's heart, is configured to exert a force against a wall of the coronary sinus sufficient to influence the size of the mitral valve annulus;

a forming element coupled with and shaping the elongate body, the forming element having a first portion that is removed from the patient after implantation of the elongate body in the coronary sinus; and

a cardiac electrode, in or on the elongate body, configured to maintain electrical coupling with a cardiac rhythm management device after implantation of the elongate body in the coronary sinus.